

IN THE CLAIMS

The following is a complete listing of the claims, and replaces all earlier listings and all earlier versions.

1. (Currently Amended) An image synthesis method comprising:
 - an input step, of inputting a plurality of image data;
 - a placement information generating step, of generating placement information determined by a placement order of all images inputted in the input step;
 - a placement information obtaining step, of obtaining placement information about a plurality of images in which adjacent images have a common subject region;
 - a setting step, of automatically setting one mapping mode out of a plurality of mapping modes each corresponding to a different mapping surface ~~in accordance with the obtained placement information~~ by computations involving the horizontal and vertical placement of images;
 - a synthesis step, of combining the plurality of images by using the mapping mode set in the setting step;
 - a changing step, of changing the mapping mode; and
 - a generating step, of issuing, when an image formed by changing the mapping mode in the changing step does not comply with a predetermined condition set in accordance with the mapping mode, a warning and generating and displaying a synthesized image in accordance with the predetermined condition, the warning being issued in a case in which the synthesized image exceeds a predetermined angle of view when a cylindrical

mapping mode is changed to a planear mapping mode while simultaneously generating and displaying the synthesized image within the predetermined range of viewing angle.

2. (Previously Presented) An image synthesis method according to Claim 1, further comprising:

a focal length obtaining step, of obtaining focal length information of each of the images,

wherein the mapping mode in accordance with the focal length information and the placement information is used in the synthesis step.

3. and 4. (Canceled)

5. (Previously Presented) An image synthesis method according to Claim 1, further comprising a displaying step, of displaying a cuttable rectangular region without a margin in the synthesized image.

6. (Currently Amended) An image synthesis apparatus comprising:
inputting means for inputting a plurality of image data;
placement information generating means for generating placement information determined by a placement order of all images inputted by the inputting means;
placement information obtaining means for obtaining placement information about a plurality of images in which adjacent images have a common subject region;

setting means for automatically setting one mapping mode out of a plurality of mapping modes each corresponding to a different mapping surface ~~in accordance with the obtained placement information~~ by computations involving the horizontal and vertical placement of images;

synthesis means for combining the plurality of images by using the mapping mode set by the setting means;

generating means for issuing, when an image formed by changing the mapping mode by the changing means does not comply with a predetermined condition set in accordance with the mapping mode, a warning and generating and displaying a synthesized image in accordance with the predetermined condition, the warning being issued in a case in which the synthesized image exceeds a predetermined angle of view when a cylindrical mapping mode is changed to a planear mapping mode while simultaneously generating and displaying the synthesized image within the predetermined range of viewing angle; and

display means for displaying a cuttable rectangular region without a margin in the synthesized image.

7. (Previously Presented) An image synthesis apparatus according to Claim 6, further comprising:

focal length obtaining means for obtaining focal length information of each of the images,

wherein the synthesis means uses the mapping mode in accordance with the focal length information and the placement information.

8. (Original) An image synthesis apparatus according to Claim 6, further comprising changing means for changing the mapping mode.

9. and 10. (Canceled)

11. (Currently Amended) A computer-readable storage medium having recorded thereon a program for implementing a computer-implementable image synthesis method for combining a plurality of images, the program comprising:

an input step, of inputting a plurality of image data;

a placement information generating step, of generating placement information determined by a placement order of all images inputted in the input step;

a placement information obtaining step, of obtaining placement information about a plurality of images in which adjacent images have a common subject region;

a setting step, of automatically setting one mapping mode out of a plurality of mapping modes each corresponding to a different mapping surface ~~in accordance with the obtained placement information~~ by computations involving the horizontal and vertical placement of images;

a synthesis step, of combining the plurality of images by using the mapping mode set in the setting step;

a changing step, of changing the mapping mode; and

a generating step, of issuing, when an image formed by changing the mapping mode in the changing step does not comply with a predetermined condition set in accordance with the mapping mode, a warning and generating and displaying a synthesized

image in accordance with the predetermined condition, the warning being issued in a case in which the synthesized image exceeds a predetermined angle of view when a cylindrical mapping mode is changed to a planear mapping mode while simultaneously generating and displaying the synthesized image within the predetermined range of viewing angle.

12. (Previously Presented) A computer-readable storage medium according to Claim 11, the program further comprising:
a focal length obtaining step, of obtaining focal length information of each of the images,
wherein the mapping mode in accordance with the focal length information and the placement information is used in the synthesis step.

13. (Previously Presented) A computer-readable storage medium according to Claim 11, the program further comprising a changing step, of changing the mapping mode.

14. - 25. (Canceled)

26. (Currently Amended) An image synthesis method comprising:
an input step, of inputting a plurality of image data;
a placement information generating step, of generating placement information determined by a placement order of all images inputted in the input step;

a placement information obtaining step, of obtaining placement information about a plurality of images in which adjacent images have a common subject region;

a setting step, of automatically setting one mapping mode out of a plurality of mapping modes each corresponding to a different mapping surface ~~in accordance with the obtained placement information~~ by computations involving the horizontal and vertical placement of images;

a synthesis step, of combining the plurality of images by using the mapping mode set in the setting step; and

a warning step, of issuing a warning in a case in which the synthesized image exceeds a predetermined angle of view when a cylindrical mapping mode is changed to a planear mapping mode while simultaneously generating and displaying the synthesized image within the predetermined range of viewing angle.

27. (Currently Amended) An image synthesis apparatus comprising:

inputting means for inputting a plurality of image data;

placement information generating means for generating placement information determined by a placement order of all images inputted by the inputting means;

placement information obtaining means for obtaining placement information about a plurality of images in which adjacent images have a common subject region;

setting means for automatically setting one mapping mode out of a plurality of mapping modes each corresponding to a different mapping surface ~~in accordance with the obtained placement information~~ by computations involving the horizontal and vertical placement of images;

synthesis means for combining the plurality of images by using the mapping mode set by the setting means;

warning means for issuing a warning in a case in which the synthesized image exceeds a predetermined angle of view when a cylindrical mapping mode is changed to a planear mapping mode while simultaneously generating and displaying the synthesized image within the predetermined range of viewing angle; and

display means for displaying a cuttable rectangular region without a margin in a synthesized image.

28. (Currently Amended) A computer-readable storage medium having recorded thereon a program for implementing a computer-implementable image synthesis method for combining a plurality of images, the program comprising:

an input step, of inputting a plurality of image data;

a placement information generating step, of generating placement information determined by a placement order of all images inputted in the input step;

a placement information obtaining step, of obtaining placement information about a plurality of images in which adjacent images have a common subject region;

a setting step, of automatically setting one mapping mode out of a plurality of mapping modes each corresponding to a different mapping surface ~~in accordance with the obtained placement information~~ by computations involving the horizontal and vertical placement of images;

a synthesis step, of combining the plurality of images by using the mapping mode set in the setting step; and

a warning step, of issuing a warning in a case in which the synthesized image exceeds a predetermined angle of view when a cylindrical mapping mode is changed to a planear mapping mode while simultaneously generating and displaying the synthesized image within the predetermined range of viewing angle.

29. (Currently Amended) An image synthesis method, which is capable of synthesizing an image by using a plurality of mapping modes, comprising:

an input step, of inputting a plurality of image data;

a first synthesis step, of combining the plurality of images inputted in said input step by using a cylindrical mapping mode;

a discriminating step, of discriminating whether a synthesized image of the plurality of images exceeds a predetermined angle of view or not when a change of the mapping mode used in said first synthesis step to a planear mapping mode is indicated; and

a warning step, of issuing a warning if it is discriminated in said discriminating step that the synthesized image exceeds the predetermined angle of view while simultaneously generating and displaying the synthesized image within the predetermined range of viewing angle.